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cont. expression of CaMKIIa (without a GFP-tag) together with a similar amount of GFP-CaMKIIb did not affect the cortical localization of GFP-CaMKIIb (data not shown). Using the same co-localization protocols as described above, we also found a marked co-localization between GFP-CaMKIIa, co-expressed with CaMKIIb, and anti PSD-95 antibodies (not shown). In living neurons, GFP-CaMKIIa, co-expressed with CaMKIIb, showed a marked localization juxtaposed to the presynaptic marker FM 4-64 (not shown).--

IN THE CLAIMS:

Please cancel claims 7-10 and 26-45 without prejudice to or disclaimer of the subject matter contained therein.

Please amend the claims as follows:

1. (Amended) A method of detecting a (protein-protein) interaction, comprising:

(a) providing a cell (that contains) a first heterologous conjugate and a second heterologous conjugate,

wherein said first heterologous conjugate comprises

- (1) a first protein of interest conjugated to
(2) a detectable group, and

wherein said second heterologous conjugate comprises

- (1) a second protein of interest conjugated to
(2) a known protein, wherein said known protein

specifically binds to an internal structure within said cell; and

(b) detecting the signal from said ^{how} detectable group, wherein said signal ^{is the consequence of the first protein to the} being localized at said internal structure is

indicative of specific binding between said first and said second proteins of interest.

3. (Amended) A method according to claim 1, wherein said cell contains and expresses a nucleic acid encoding said first heterologous conjugate.

5. (Amended) A method according to claim 1, wherein said cell contains and expresses a nucleic acid encoding said second heterologous conjugate.

6. (Amended) A method according to claim 1, wherein said first and second proteins of interest are known to specifically bind to one another.

Please add the following new claims:

--47. (NEW) The method according to claim 1, wherein said detectable group is (derived) from Green Fluorescent Protein (GFP).—

--48. (NEW) The method according to claim 1, wherein said

localization occurs when said first protein of interest binds directly to said second protein of interest.--

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cont.
--49. (NEW) The method according to claim 19, wherein said known protein that specifically binds to said internal structure is a protein kinase C isoform (or a fragment) thereof that specifically binds to an internal structure and wherein the step of inducing translocation comprises adding a phorbol ester.--

Attached hereto is a marked-up version of the changes made to the application by this Amendment.